

REMARKS

The Office action mailed on 5 December 2003 (Paper No. 4) has been carefully considered.

The specification and the abstract are being amended to correct minor errors and improve form. Claim 5 is being amended. Thus, claims 1-20 are pending in the application.

In paragraph 3 of the Office action, the Examiner objected to Figure 3 as containing reference numeral "S11" which is not mentioned in the specification. The specification is being amended to include "S11". More specifically, paragraph [0037] is being amended to contain a description of the operations carried out when back light manual control function is not selected in decision block S9. Thus, paragraph [0037] now states that which was obvious from the disclosure of Fig. 3 of the present application, as originally filed, that is, that when the user does not select the back light manual control function in decision block S9, automatic back light is controlled according to a contrast sensing part, as described in operation block S11 of Fig. 3. Withdrawal of the objection to the drawing is therefore respectfully requested.

In paragraph 4 of the Office action, the Examiner objected to the Abstract for containing more than 150 words. The Abstract is being amended to have less than 150 words. Withdrawal of the objection to the Abstract is therefore respectfully requested.

In paragraph 6 of the Office action, the Examiner rejected claims 1, 2, 5 and 12 thru 15 under 35 U.S.C. §103 for alleged unpatentability over Lee, U.S. Patent No. 5,818,172 in view of Applicant's admitted prior art (APA), Mortimer, U.S. Patent No. 5,751,118 and Nomoto, Japanese Patent Publication No. 07-211476. In paragraph 7 of the Office action, the Examiner rejected claims 3, 6 thru 11, 16, 18 and 19 under 35 U.S.C. §103 for alleged unpatentability over Lee '172 in view of APA, Mortimer '118 and Nomoto '476, and further in view of Helms, U.S. Patent No. 5,952,992. In paragraph 8 of the Office action, the Examiner rejected claims 4, 17 and 20 under 35 U.S.C. §103 for alleged unpatentability over Lee '172 in view of APA, Mortimer '118, Nomoto '476 and Helms '992 in view of Saito *et al.*, U.S. Patent No. 5,315,695. For the reasons stated below, it is submitted that the invention recited in the claims, as now amended, is distinguishable from the prior art cited by the Examiner so as to preclude rejection under 35 U.S.C. §103.

It is respectfully submitted that the invention as recited in independent claims 1 and 13 is distinguishable from the prior art cited by the Examiner so as to preclude rejection under 35 U.S.C. §103. In that regard, in paragraph 6 on page 3 of the Office action, the Examiner admits that Lee '172 does not disclose or teach a contrast sensing part, a DC converter, or a voltage controller. However, it should also be noted that Lee '172 does not disclose or suggest a controller connected in series with a DC/AC inverter for sensing the operating voltage of the inverter, and for controlling the voltage controller on the basis of the operating voltage of the inverter, as recited in independent claim 1.

With respect to the recited contrast sensing part, the Examiner alleges that page 2, paragraph [0006] of the present application constitutes "Applicant's admitted prior art (APA)" in that, according to the Examiner, that portion of the application constitutes a "prior art" disclosure of a contrast sensing part for sensing contrast of the video signal and automatically controlling the back light brightness in accordance therewith. Applicant respectfully disagrees with this allegation by the Examiner.

Specifically, at no point in the present application does the Applicant state that the portion of the disclosure appearing at page 2, paragraph [0006] of the application constitutes "prior art" as defined in the various sub-sections of 35 U.S.C. §102. Moreover, Applicant is not aware of any prior patent or publication, and the Examiner has not cited any prior patent or publication, disclosing the employment of a contrast sensing part as recited in independent claims 1 and 13 of the present application.

In other words, the system described by the Applicant on page 2 of the application is merely a "prior system" known to the Applicant, but Applicant is not aware of any prior patent or publication which discloses such a "prior system". Therefore, in the absence of any citation by the Examiner of a prior patent or publication disclosing that which is described on page 2 of the present application, that portion of the present application cannot properly be employed as "prior art". Thus, a first point of distinction between the invention recited in independent claims 1, 5 and 13 is that there is no disclosure or suggestion in the prior art of a portable computer system having a contrast sensing part for sensing contrast of a video signal displayed on an LCD panel and

outputting a pulse width modulation (PWM) or back light control signal, as recited in the independent claims of the present application.

Furthermore, with respect to the Examiner's allegation (at the top of page 4 of the Office action) to the effect that one of ordinary skill in the art would have been motivated to combine the contrast sensing part mentioned in the present application with the back light circuit taught by Lee '172, the Examiner merely makes the general statement that "Lee is directed to preserving battery power while providing the highest degree of efficiency to optimize power consumption" (see page 4, lines 3-4 of the Office action). However, the Examiner does not cite any particular portion of Lee '172 containing such a motivation. Therefore, it is very doubtful that one of ordinary skill in the art, upon reviewing the disclosure of Lee '172, would be motivated to adopt a contrast sensing part as a part of the back light circuit taught by Lee '172.

With respect to the failure of Lee '172 to disclose the claimed DC converter for converting a PWM signal from a contrast sensing part into a DC signal, the Examiner cites Mortimer '118 as allegedly teaching a dimming circuit for driving a fluorescent lamp, the circuit including a "low-pass filter that creates a DC level from a PWM signal" (quoting from page 4, line 7 of the Office action). In the latter regard, the Examiner cites column 3, lines 1-4 of Mortimer '118. However, that portion of Mortimer '118 merely contains a general statement as to the manner in which a low-filter, comprising resistors R18 and R19 and capacitor C5 in Fig. 2 of the patent, demodulates a PWM signal appearing at the node joining the resistors R18 and R19 so as to create "a DC level which

is then applied to the ballast control circuit" (quoting from column 3, lines 3-4 of Mortimer '118).

However, even if Mortimer '118 can be said to teach the creation of a DC level from a PWM signal, as alleged by the Examiner, the Examiner does not point to any specific portion of Lee '172 which would provide, to a person of ordinary skill in the art, the necessary motivation to seek and incorporate the disclosure of Mortimer '118 so as to modify the disclosure of Lee '172 and arrive at the claimed invention. In the latter regard, the Examiner merely makes the general statement that Lee '172 and the alleged APA are directed to lowering brightness of a back light to save power (see page 4, third paragraph of the Office action). However, this general statement of motivation is not sufficient to enable a person of ordinary skill in the art to take the portion of the circuit shown in Fig. 2 of Mortimer '118 and incorporate it into modification of the circuitry or system disclosed in Lee '172. This is especially true since there is no resemblance between the detailed circuitry disclosed in Fig. 2 of Mortimer '118 and the general system diagram disclosed in Fig. 3 of Lee '172.

Furthermore, it is submitted that one of ordinary skill in the art, upon reviewing Lee '172, would not be motivated to seek and incorporate the disclosure of Mortimer '118 since Mortimer '118 derives the DC level signal in order to provide it to a ballast control circuit, whereas the claimed invention involves the conversion of a PWM signal into a DC signal by a DC converter, and then provision of the resulting DC signal, via a voltage controller, as an operating voltage to a DC/AC inverter. Thus, the claimed

arrangement is quite far removed from the combined disclosures of Lee '172 and Mortimer '118, which raises a question as to whether one of ordinary skill in the art, even if provided with the motivation to seek the disclosure of Mortimer '118, would obtain from Lee '172 and/or Mortimer '118 the instructions necessary for producing the system for recited in the claims of the present application.

With regard to the recited voltage controller, on page 4 of the Office action, the Examiner cites Nomoto '476 as disclosing a voltage controller 14 connected to a DC/AC inverter 13. However, again, there is no motivation provided by Lee '172 which would enable a person of ordinary skill in the art to seek and incorporate the disclosure of Nomoto '476 into any modification of the disclosure of Lee '172. Thus, this raises a further question as to the validity of combining the primary reference, Lee '172, with the other cited references. Furthermore, it should be noted that, in stating the rejection under 35 U.S.C. §103, the Examiner has admitted that, of the five elements making up the system recited in claim 1, at least three of the five elements are not disclosed in the primary reference, Lee '172. In addition, the Examiner admits that, with respect to claim 13, of the four elements making up the system recited in that claim, at least three of those elements are not disclosed in the primary reference, Lee '172. This raises a serious question as to the validity of the rejection under 35 U.S.C. §103, and the validity of the combination of references cited in connection with that rejection, because it raises a serious question as to whether one of ordinary skill in the art, starting with the disclosure of Lee '172, which is devoid of any disclosure or suggestion of a majority of the elements

of the recited system, would have been able to develop the claimed system without undue experimentation. In other words, it raises a serious question as to whether one of ordinary skill in the art, upon reviewing the disclosure of Lee '172, would have found it obvious to develop a major portion of the claimed system so as to arrive at the present invention.

With respect to independent method claim 5, that claim has been amended to recite the contrast sensing part as being "connected to the LCD panel", and to recite the last step of original method claim 5 in terms of four steps. In view of the amendment of independent method claim 5, it is respectfully submitted that the inventive method is distinguishable from the prior art cited by the Examiner for the same reasons set forth above relative to the system claims 1 and 13. That is to say, just as the system claims recite elements and functions not disclosed or suggested in the prior art cited by the Examiner, or not obvious to one of ordinary skill in the art based on the cited references, independent method claim 5 recites a series of steps corresponding to the functions recited in independent system claims 1 and 13, and also recites the hardware elements recited in system claims 1 and 13, so that independent method claim 5 should be found allowable over the prior art cited by the Examiner on the same basis as independent system claims 1 and 13.

Submitted with this amendment is corrected fig. 2, in which a spelling error (the word "KEYBOARD") is being corrected.

In view of the above, it is submitted that the claims of this application are in condition for allowance, and early issuance thereof is solicited. Should any questions remain unresolved, the Examiner is requested to telephone Applicant's attorney.

No fee is incurred by this response.

Respectfully submitted,



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Annotated Sheet Showing Changes

FIG. 2

